

In the Claims:

1. (Currently Amended) An acetabular reamer, which comprises:
 - a) a cutting shell having a curvature comprising at least a portion of a hemisphere; and
 - b) a plurality of cutting teeth thereon, wherein each cutting tooth comprises two buttress portions extending from the cutting shell and meeting an intermediate cutting edge having a hemispherical ~~cutting edge~~ curvature ~~for a significant portion of its length.~~
2. (Previously Presented) The reamer of claim 1 wherein a generally circular hole precedes each of the cutting edges as the reamer is rotated for cutting.
3. (Previously Presented) The reamer of claim 1 wherein the cutting teeth are arranged uniformly and spaced apart on the cutting shell.
4. (Previously Presented) The reamer of claim 3 wherein the cutting teeth are arranged in a spiral arrangement on the cutting shell.
5. (Cancelled)
6. (Cancelled)
7. (Previously Presented) The reamer of claim 2 wherein the reamer includes a series of cutting teeth arranged uniformly and spaced apart on the cutting shell.

8. (Previously Presented) The reamer of claim 2 wherein the cutting teeth are arranged in a spiral configuration on the cutting shell.

9. to 12. (Cancelled)

13. (Currently Amended) An acetabular reamer, which comprises:

- a) a cutting shell having a curvature;
- b) a plurality of cutting teeth extending upwardly from the cutting shell, each cutting tooth comprising two buttress portions extending from the cutting shell and meeting an intermediate cutting edge spaced furthest from the shell, the intermediate cutting edge having a cutting curvature that ~~substantially~~ matches the curvature of the shell for the intermediate cutting edge's a significant portion of its length until it meets the buttresses; and
- c) wherein the cutting edges of the plurality of cutting teeth ~~extend~~ extending upwardly from the cutting shell are in an overlapping arrangement so that rotation of the reamer against bone cuts a hemispherically shaped cavity into the bone ~~having a relatively smooth contour matching the curvature of the cutting shell.~~

14. (Cancelled)

15. (Currently Amended) An acetabular reamer, which comprises:

- a) a cutting shell having a curvature defined by a cutting shell radius; and
- b) a plurality of cutting teeth thereon, wherein each cutting tooth comprises two buttress portions extending from the cutting shell and meeting an intermediate cutting edge spaced furthest from the cutting shell, the cutting edge ~~having~~ defined by a plurality of cutting edge radii ~~radius~~ that define a hemispherical shape ~~substantially matches a hemisphere for a significant portion of its length.~~

16. (Currently Amended) An acetabular reamer for cutting a hemispherical shape, comprising:

- a) a cutting shell defining a spherical center and ~~[[a]]~~ carrying a plurality of raised teeth positioned thereon with adjacent openings; and
- b) at least one tooth having an arc cutting edge with a constant radius from the spherical center and two secondary edges supported by gussets which curve toward the shell.